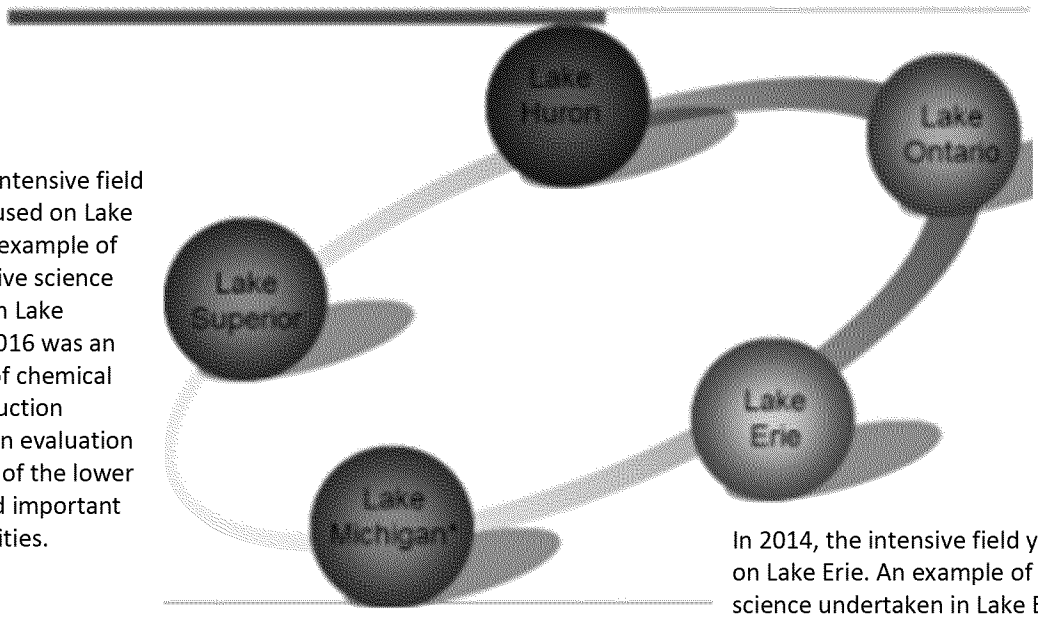
Implementing a cooperative science and monitoring initiative for each of the Great Lakes on a five-year rotational basis.

- The Cooperative Science and Monitoring Initiative (CSMI) was developed under the 1987 GLWQA in order to binationally coordinate the research and monitoring activities being undertaken in the Great Lakes basin and to ensure that the necessary science is efficiently provided to support Great Lakes decision-making and management actions. Each year, as part of the CSMI, U.S. and Canadian organizations assess one of the Great Lakes during that Lake's intensive CSMI field year. This emphasis on one Great Lake per year allows for enhanced coordination of research and monitoring activities, as well as the cooperation on specific science assessments, in that particular Great Lake during that year. This intensive CSMI field year follows a five year rotating cycle (as shown in Figure 15).
- The CSMI process includes the following steps leading up to and following the intensive field year: 1) identification of research and monitoring needs and other science priorities to assess threats to Great Lakes water quality and support management actions; 2) planning, which involves working with governmental and academic scientists to develop and coordinate specific research activities for Great Lake in question; 3) undertaking the coordinated monitoring and cooperative science assessments (i.e. intensive field year); 4) laboratory analysis; 5) data analysis and reporting; and, 6) final report and communicating out.

Figure 15 – The Cooperative Science and Monitoring Initiative rotational cycle.

In 2017, the intensive field year will be focused on Lake Huron.



In 2016, the intensive field year was focused on Lake Superior. An example of the cooperative science undertaken in Lake Superior in 2016 was an assessment of chemical emission reduction actions and an evaluation of the health of the lower food web and important fish communities.

In 2015, the intensive field year was focused on Lake Michigan. An example of the cooperative science undertaken in Lake Michigan in 2015 was to address nutrient and contaminant loads to the lake, to address contaminants in the lake, and to investigate the movement of nutrients and energy from nearshore to offshore waters.

In 2014, the intensive field year was be focused on Lake Erie. An example of the cooperative science undertaken in Lake Erie in 2014 was an assessment of Dreissenid mussel populations, nutrient loadings from rivers and western basin sediments, and development of a phosphorus mass balance model for the western and central basin.

In 2013, the intensive field year was Lake Ontario. An example of the coo science undertaken in Lake Ontario i an assessment of the lower food we implementation of projects across fe state agencies examining nutrient lo the nearshore-to-offshore movemer nutrients.

In 2018, the intensive field year will be focused on Lake Ontario.

In 2019, the intensive field year will once again